Indiana Traffic Safety Facts 2000

Older Population

http://www.in.gov/cji

Of the more than 25 million people in the United States age 70 years and older in 2000, 549,094 resided in Indiana. Representing 9.0% of Indiana's total population of 6,080,485, the 70+ age group accounted for 9.3% (371,279) of the 3,976,241 licensed drivers in the state. This figure has increased 28.4% since 1990, when Indiana reported a total of 289,148 licensed drivers age 70 and over. Nationally, this segment of the population has grown at twice the rate of the total population.[1]

Indiana's most recent personal injury crash data (1999)[2] indicates that of the 72,883 injuries sustained in traffic crashes, 3.7% (2,539) of those injuries involved people age 70 years and older. This is less than the national figure for this age group, which accounted for 5.0% of all people injured in traffic crashes in 1999. In 2000, Indiana's older drivers accounted for 12.2% (108) of all traffic fatalities (886), 12.0% (98) of all vehicle occupant fatalities (816), and 17.9% (10) of all pedestrian fatalities (54). At the national level, these numbers were 12.8% of all traffic fatalities, 12.4% for all vehicle occupant fatalities, and 16.8% for all pedestrian fatalities.

Indiana's older drivers made up 12.2% of all traffic fatalities...

There were 67 older drivers killed in fatal crashes in Indiana during 2000, with 90.0% of those crashes occurring during the daytime (90.0%), as compared to young driver[3] fatalities, which occurred only 51.7% of the time during the day. Further, the number of traffic fatalities among the older population primarily occurred on a Tuesday or Thursday (11 each day).

Nationally, fatalities for drivers age 70 and older involved another vehicle 74.1% of the time, while in Indiana the percentage was slightly higher at 76.1%. Although Indiana's figures are not available, on a national basis 40.1% of these older drivers whose speed was reported died in fatal crashes while traveling at speeds of 25 miles per hour or less. In multiple vehicle fatal crashes involving an older driver, 59.5% (50 of 84) of the older drivers were proceeding straight at the time of the collision, which differs just slightly from the national figure of 57.4%. The second most common maneuver by older drivers involved in fatal crashes was making a left turn. In Indiana, 14.3% (12 of 84) of older drivers were performing this maneuver at the time of their fatal crash, compared to the national level where the figure was much higher at 24.7%.

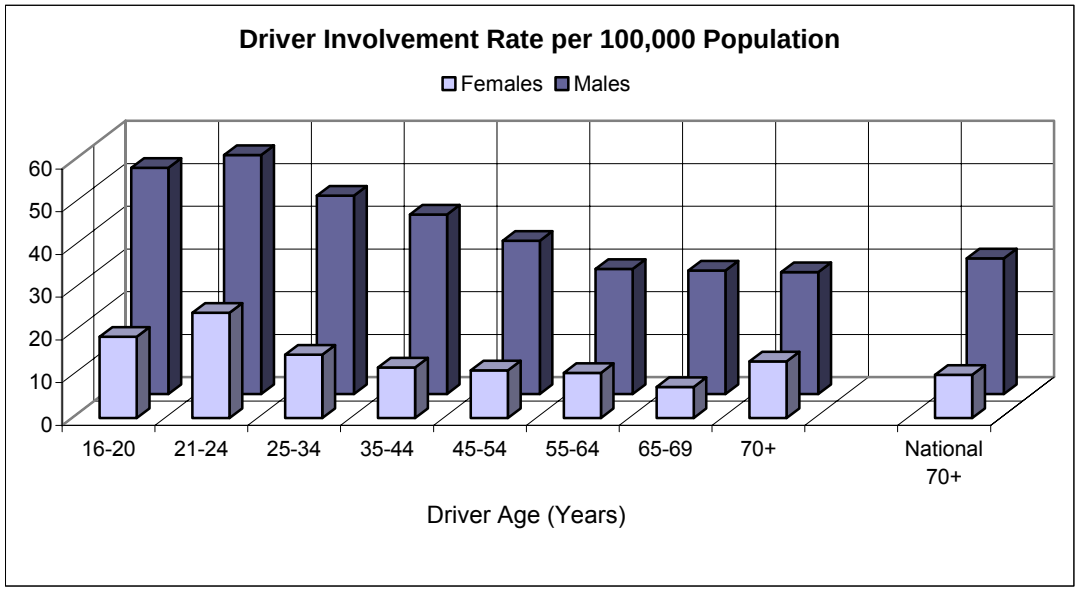
Nationally, older drivers involved in fatal crashes had the lowest reported involvement with alcohol for 2000. Indiana's older drivers followed this trend, as only three of the fatalities were legally intoxicated, while one other had alcohol in his system.[4] Only one pedestrian killed in a motor vehicle crash (out of 10) in this age group was known to have had alcohol in his system.

[1] Population figures taken from the National Highway Traffic Safety Administration's "Traffic Safety Facts 2000, Older Population." This document is available online at http://www.nhtsa.dot.gov/.
[2] 1999 *Indiana Crash Facts*, Table 6. Data supplied by 1999 Indiana State Police Crash Reporting Database.
[3] A young driver includes drivers 16 to 20 years old.
[4] The National Highway Traffic Safety Administration would define this crash as having *alcohol involvement* if the driver has a blood alcohol concentration (BAC) of .01% or greater.

Only 64.8% of Indiana's older occupant fatalities were properly restrained.

Moreover, nationwide in 2000, only 60.7% of all older occupants killed were using restraints at the time of the crash. However, 64.8% of Indiana's older occupant fatalities were properly restrained during their crash. While much less than 100%, this was still better than the restraint use for all other Indiana adult vehicle occupants (including drivers and passengers ages between the ages of 18 and 69, which was only 32.8%. Despite this, it is clear that Indiana's older population would be safer if they would buckle up each time they were in a motor vehicle.

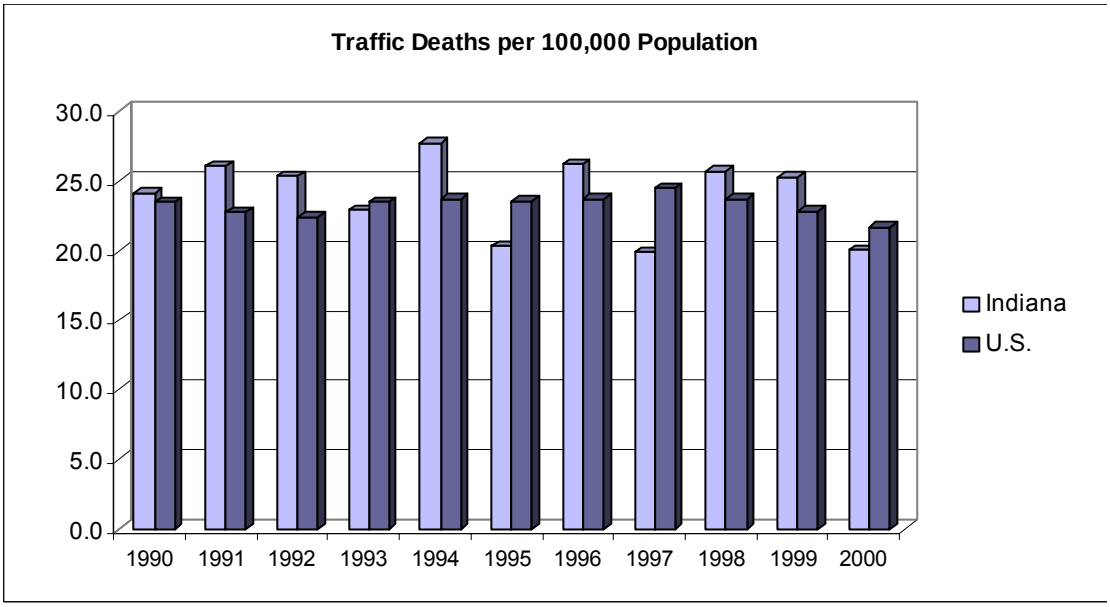
Figure 1. Driver Involvement Rates in Fatal Crashes by Age and Sex, 2000



Of the 56 pedestrians killed by motor vehicles, 10 (17.9%) of them were from the older population group. Of those pedestrian fatalities, 70.0% of them occurred at non-intersection locations. Comparatively, for all other pedestrian fatalities age 69 or less, 87.5% occurred at non-intersection locations.

Figure 2. Older Driver Traffic Fatality Rates, Indiana and U.S., 2000

Indiana has had higher older driver traffic death rates per 100,000 population than the rest of the U.S. for seven of the last ten years.



NHTSA estimates that after the age of 55, driver fatality rates per vehicle mile traveled (VMT) become increasingly higher with age. Nationally, the fatality rate for drivers age 85+ is nine times higher than the fatality rate for drivers 25 through 69 years old.

Figure 3. Rates of Older Drivers Involved in Fatal Crashes, Indiana vs. U.S., 2000

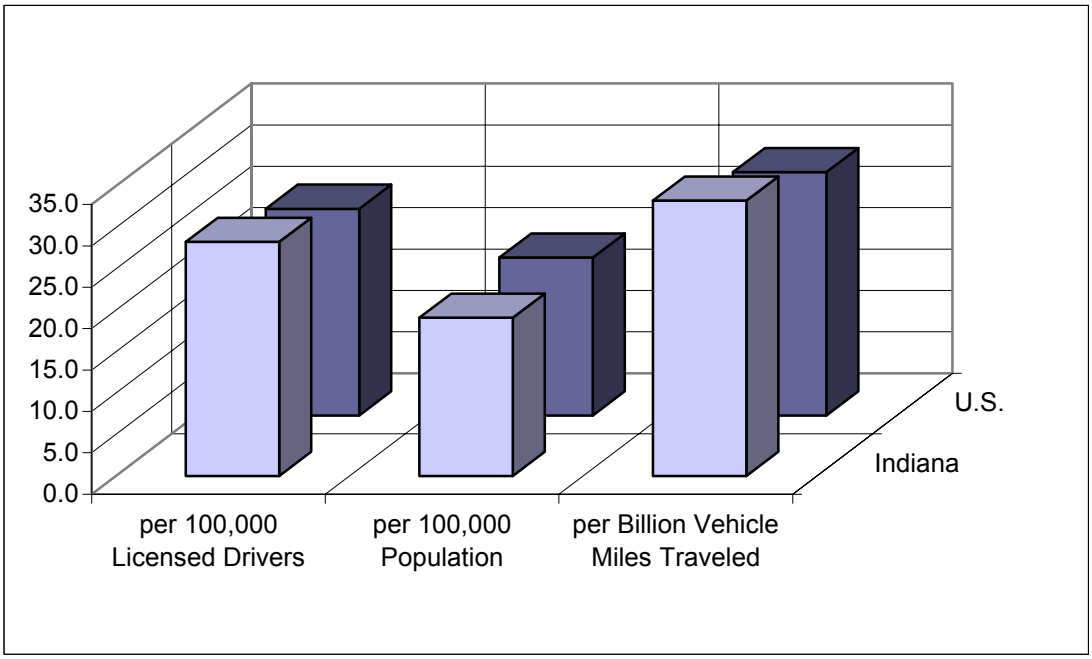


Table 1. Demographic Data on Older Drivers (70+), Indiana vs. U.S., 2000

	Licensed Drivers	Population	Vehicle Miles Traveled
Indiana	371,279	549,094	3,155,658,681
U.S.	18,939,927	24,808,000	160,978,519,081

Conclusion

Driver awareness or reaction time may be crucial factors in these fatal crashes.

Table 1 and Figure 3 are included in order to compare Indiana with the United States. Table 2 is included for the purpose of comparing the older population with the total population of drivers from 1990 and 2000. Older drivers had the highest fatality rate for adults over age 30. Unlike other age groups, most of the fatal crashes did not involve alcohol, and were usually at slower speeds, suggesting that driver awareness or reaction time may be crucial factors in these fatal crashes. Figure 1 suggests that males are considerably more likely to be involved in a fatal crash per 100,000 population than females. This could actually be a misleadingly high result due to the fact that based upon seat belt observational surveys, more males than females tend to drive when males and females travel together, thereby increasing the male driver involvement rate. While Indiana's older fatally injured drivers tended to buckle up slightly more than the rest of the nation, there is still considerable room for improvement among the older population, as well as all other age groups. With the older driver population gaining in numbers, Indiana will need to continue to carefully monitor the contributing circumstances of traffic crashes and fatalities, while working with others in the transportation arena to assure that the aging driver can safely travel as unimpeded as possible.

Table 2. Involvement of Older Population in Traffic Fatalities, 1990 and 2000

	1990			2000			Percentage Change, 1990-2000		
							Number		
	Total	Age 70+	Percentage of Total	Total	Age 70+	Percentage of Total	Total	Age 70+	Percentage Age 70+
Population (thousands)									
Total	5,555,097	471,619	8.5%	6,080,485	549,094	9.0%	9.5%	16.4%	6.4%
Male	2,693,279	174,146	6.5%	2,982,474	210,353	7.1%	10.7%	20.8%	9.1%
Female	2,861,818	297,473	10.4%	3,098,011	338,741	10.9%	8.3%	13.9%	5.2%
Drivers Involved in Fatal Crashes									
Total	1,425	103	7.2%	1,286	105	8.2%	-9.8%	1.9%	13.0%
Male	1,085	66	6.1%	946	60	6.3%	-12.8%	-9.1%	4.3%
Female	334	31	9.3%	338	45	13.3%	1.2%	45.2%	43.4%
Driver Fatalities									
Total	665	65	9.8%	583	67	11.5%	-12.3%	3.1%	17.6%
Male	500	41	8.2%	430	35	8.1%	-14.0%	-14.6%	-0.7%
Female	165	24	14.5%	153	32	20.9%	-7.3%	33.3%	43.8%
Total Traffic Fatalities									
Total	1,049	114	10.9%	886	*108*	12.2%	-15.5%	-5.3%	12.2%
Male	708	59	8.3%	587	47	8.0%	-17.1%	-20.3%	-3.9%
Female	341	55	16.1%	299	61	20.4%	-12.3%	10.9%	26.5%
Occupant Fatalities									
Total	267	32	12.0%	225	31	13.8%	-15.7%	-3.1%	15.0%
Male	132	9	6.8%	103	8	7.8%	-22.0%	-11.1%	13.9%
Female	135	23	17.0%	122	23	18.9%	-9.6%	0.0%	10.7%
Pedestrian Fatalities									
Total	102	16	15.7%	54	10	18.5%	-47.1%	-37.5%	18.1%
Male	64	8	12.5%	33	4	12.1%	-48.4%	-50.0%	-3.0%
Female	38	8	21.1%	21	6	28.6%	-44.7%	-25.0%	35.7%

This publication was prepared on behalf of the Indiana Criminal Justice Institute by Purdue University's Center for the Advancement of Transportation Safety. All information contained within this document was gathered from the Fatality Analysis Reporting System (FARS) Web-Based Encyclopedia provided by the National Highway Traffic Safety Administration (NHTSA), available online at: http://www-fars.nhtsa.dot.gov/, and the *1999 Indiana Crash Facts*. All figures are considered current as of July 2002. Please direct any questions concerning the data in this document to the Center for the Advancement of Transportation Safety, Room 322, Potter Engineering Center, Purdue University, West Lafayette, IN, 47907-1293, phone: (765) 494-7038, fax: (765) 494-2351, or visit the Center's website at: http://www/ecn.purdue.edu/cats.